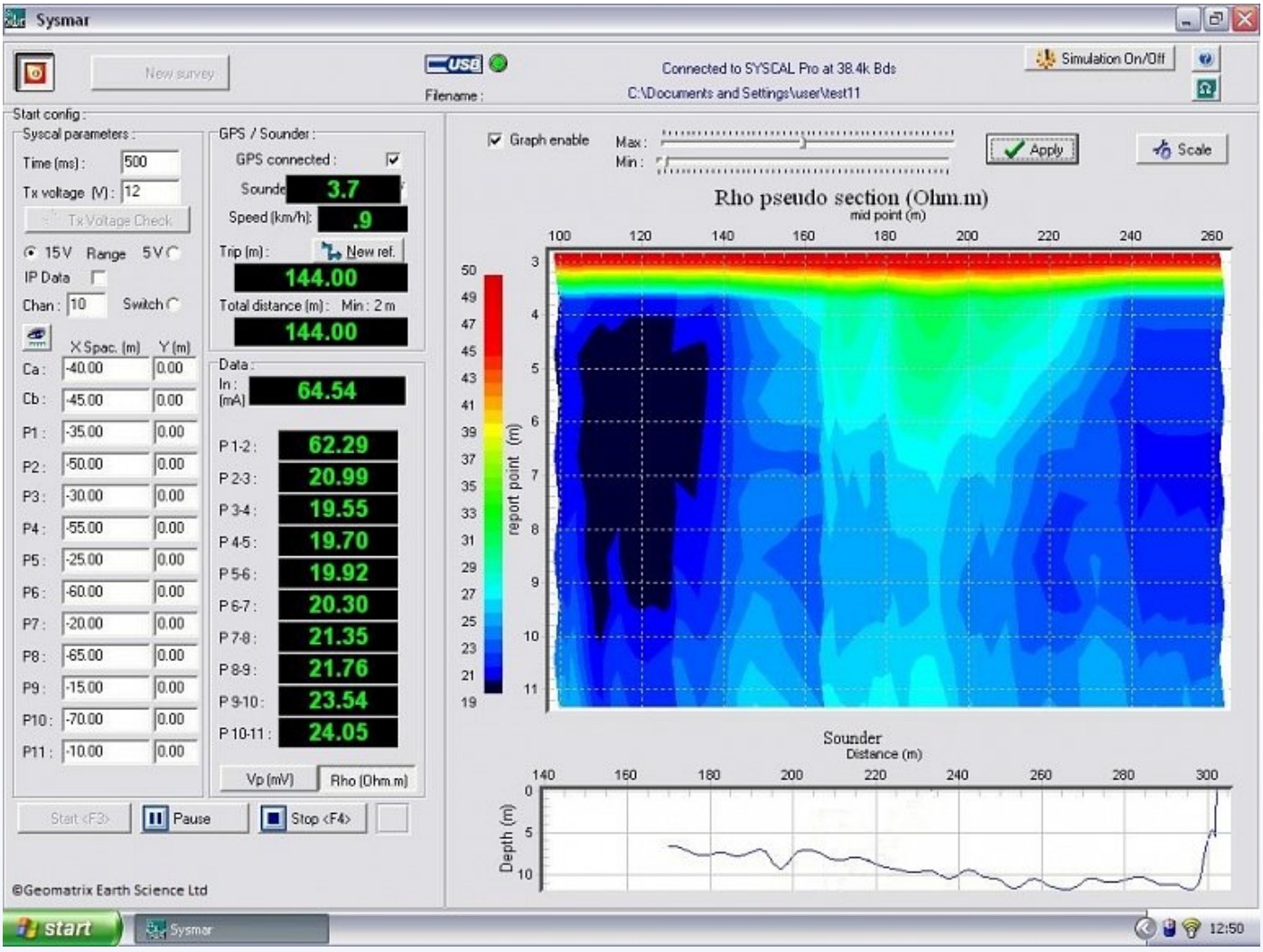
www.geomatrix.co.uk
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Tel: 01525 383438

Sysmar Data Sheet

An intuitive data acquisition software package for continuous Marine Resistivity and Induced Polarisation measurements. The Sysmar software is used to control the Syscal Pro or Syscal Pro Deep Marine resistivity meters and integrate GPS positioning and Echo Sounder bathymetry measurements ready for post processing and inversion.

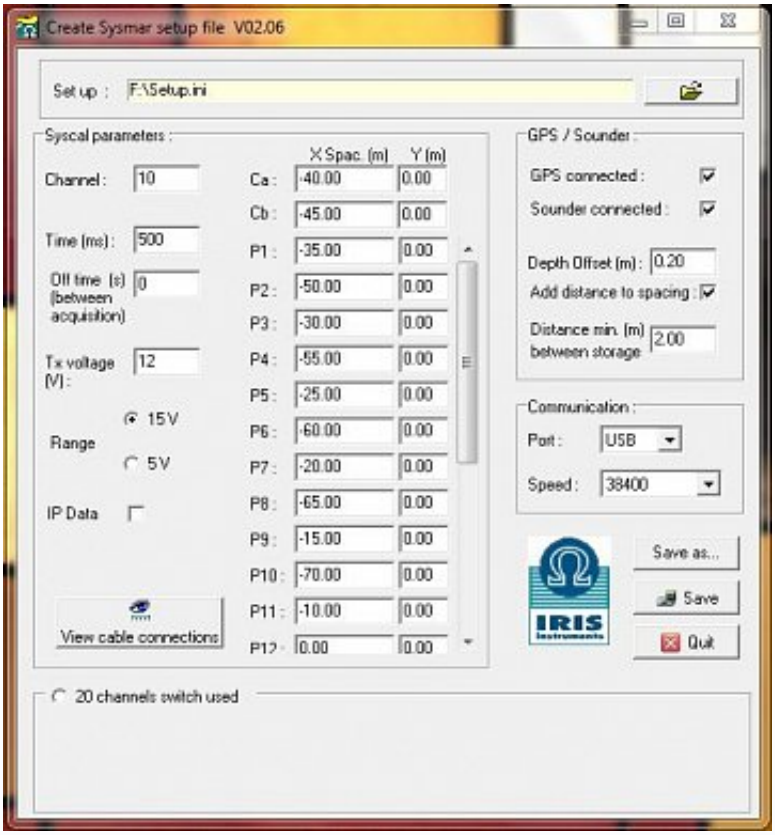


The system can be configured to record 10 simultaneous measurements or- if the Syscal includes switch circuitry- 20 multiplexed measurements.

Typically reciprocal-Schlumberger or Dipole-dipole electrode geometries are utilised for continuous marine surveys, however bespoke user defined electrode geometries can be defined. When configured with an electrode separation of 15m, a Dipole-Dipole geometry is capable of prospective to 36m whilst the reciprocal Schlumberger array will achieve 34m. Although the Dipole-Dipole geometry offers slightly greater prospection depth the reciprocal Schlumberger array offers better signal strength, good investigation depth and regular distribution of the 10 depth layers.

Geomatrix Earth Science Limited, Unit 20 Eden Way, Pages Industrial Park, Leighton Buzzard, Bedfordshire, LU7 4TZ

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Sysmar Configuration for 10 channel fresh water survey with 5m electrode separation.

In fresh water environments a standard Syscal Pro has sufficient power to achieve measurements with good signal to noise. In saline environments the current density is much lower and requires an instrument which can sustain high transmission power. The Syscal Pro deep Marine has been specifically designed for such environments offering up to 40A.

Data quality control can be performed in real-time suing the waterfall pseudo-section display and bathymetry trace.

The Sysmar software is supplied with an accompanying item of hardware which integrates the GPS and Echo Sounder records with the resistivity measurements. Measurements can be stored on the Syscal Pro or more preferably on the PC/Laptop running Sysmar.

Technical Specifications

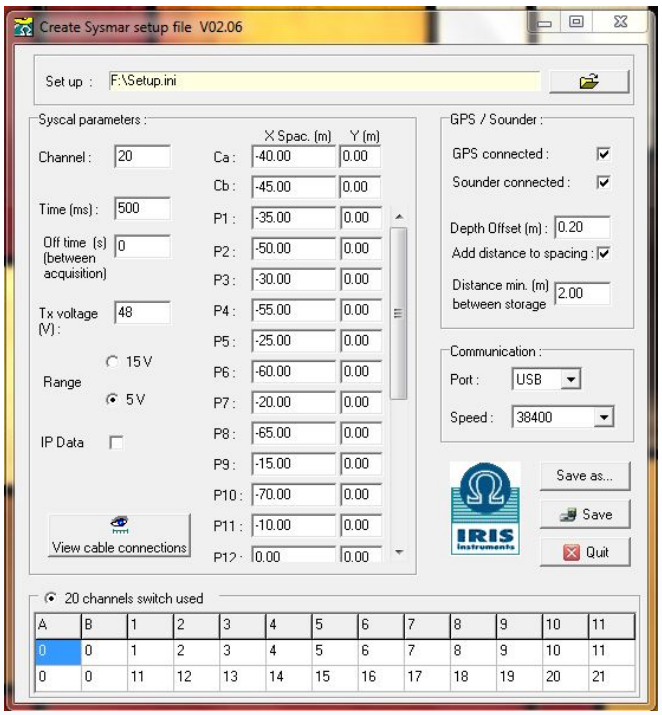
Communication:	USB, Bluetooth or Serial (RS232)
Operating System (OS):	Windows XP-10
Processor:	1GHz
RAM Memory:	1Gb
GPS input:	NMEA 0183 (with Echo-sounder depth appended)

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www.geomatrix.co.uk
sales@geomatrix.co.uk
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GPS Baud: 4800

Gallery



Typical configuration file for a saline marine survey with 20 channels and 5m electrode interval.

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